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FISH & RICHARDSON, P.C.
PO BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER
CHONG CRUZ, NADJA N

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/608,895	WITTING, THOMAS
	Examiner	**Art Unit**	
	NADJA CHONG CRUZ	4143	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>27 June 2003</u>.

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-22</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>25 September 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>See Continuation Sheet.</u>

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :11 Sep 2003, 31 May 2007 & 13 Nov 2007.

DETAILED ACTION

Status of Claims

1.   This action is in reply to the application filed on 27 June 2003.

2.   Claims 1-22 are currently pending and have been examined.

Priority

3.   Applicant's claim for the benefit of a prior-filed application, Application No. 10/413,442, under 35
U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Information Disclosure Statement

4.   The Information Disclosure Statements filed on 9 September 2003, 5 May 2007 and 13
November 2007 have been considered. Initialed copies of the Form 1449 are enclosed herewith.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

6.   Claims 15, 18 and 20-21 recites the limitation *module*. *Module* is vague and indefinite and causes
the claim indefinite. This term is not defined by the claim, the specification does not provide a
standard for ensuring the requisite degree, and one of ordinary skill in the art would not be
reasonably aware of the scope of the invention. For the purposes of this examination, *module* will
be interpreted as part of a program that performs a distinct function. Appropriate correction is
required.

7.   Claims 11, 12 and 20 recites the limitation *optimizing algorithm*. *Optimizing algorithm* is vague

and indefinite and causes the claim indefinite. This term is not defined by the claim, the

specification does not provide a standard for ensuring the requisite degree, and one of ordinary

skill in the art would not be reasonably aware of the scope of the invention. For the purposes of

this examination, *optimizing algorithm* will be interpreted as a mathematical rule or procedure

used to compute a desired result. Appropriate correction is required.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or
composition of matter, or any new and useful improvement thereof, may obtain a patent therefor,
subject to the conditions and requirements of this title.

9.   Claims 15, 20 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter.

Claim 15

- *A system for predicting outcomes of marketing campaigns, the system comprising:*
  program instructions comprising a response prediction module…

Claim 20

- *program instructions comprising an assignment module….*

Claims 15 and 20 are directed to a system, however, the steps and/or system components

appear to be software per se, which constitutes a judicial exception in the form of an algorithm,

and not an executable program tangibly embodied in a computer-readable medium.

Claim 22

- *Computer software, tangibly embodied in at least one of a computer-readable*
  medium and a propagated carrier signal,…

Claim 22 implies a *propagated carrier signal* and as such does not fall within one of the four

statutory categories of 35 U.S.C. § 101, thus, rendering the claim non-statutory.

<div align="center">**Claim Rejections - 35 USC § 102**</div>

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11.   The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA)

and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not

apply when the reference is a U.S. patent resulting directly or indirectly from an international

application filed before November 29, 2000. Therefore, the prior art date of the reference is

determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C.

102(e)).

12.   Claims 1, 5-8, 15-19, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Blume

et al (US 6,839,682 B1), hereinafter "Blume".

Examiner's Note: The Examiner has pointed out particular references contained in the prior art

of record within the body of this action for the convenience of the Applicant. Although the

specified citations are representative of the teachings in the art and are applied to the specific

limitations within the individual claim, other passages and figures may apply. Applicant, in

preparing the response, should consider fully the entire reference as potentially teaching all or

part of the claimed invention, as well as the context of the passage as taught by the prior art or

disclosed by the Examiner.

Claim 1:

- *determining a response probability for each of a plurality of customers, the customers being intended targets of a marketing campaign* (see at least column 7 lines 28-32: "Once consumer vectors have been developed ..., a reference set of consumers is selected, having known response rates to offers (or having other characteristics that are known to be related to or good predictors of response rates)." and lines 35-37: "The consumer vector for a proposed target consumer is obtained, and the nearest neighbors in the reference set are identified.");

- *determining a response value for each of the customers that indicates a predicted value of a response to the marketing campaign by the customer;* (see at least column 7 lines 32-34: "Each consumer in the reference set has a vector and a value describing the known or predicted response rate relevant to the offer being analyzed.");

- *and predicting an outcome of the marketing campaign using the response probability and the response value* (see at least column 7 lines 37-43: "The response rate among the nearest neighbors is aggregated and used as a predictor of the likely response rate for the target consumer. Based on this score for a number of potential target consumers, the marketing effort can be targeted at those consumers most likely to respond favorably, thus improving the efficiency of the marketing campaign.");

Claims 5 and 16:

- *wherein the response value is determined using a purchase history of the customer* (see at least column 36, lines 31-34: "... the membership function computes the membership value for each segment as the predicted dollar amount that the account holder will purchase in the segment given previous purchase history.");

Claim 6:

- *wherein a purchase history is not available for a customer, further comprising identifying at least one similar customer for which a purchase history is available and using the at least one similar customer's purchase history to determine the response value* (see at least column 45, lines 5-9: "For example, if response history data is unavailable, the system might instead use a sample of consumers, and consider those who have purchased the product to have accepted the offer, and those who have not purchased the product to have rejected the offer.");

Claim 7:

- *wherein the marketing campaign is to be directed also at additional customers for which no response value is determined, further comprising using a default response value for the additional customers in predicting the outcome of the marketing campaign.* (see at least column 10, lines 29-34: "...useful statistics can be generated for the segment, such as average amount spent, spending rate, ratios of how much these consumers spend in the segment compared with the population average, response rates to offers, and so forth. This information enables merchants to finely target and promote their products to the appropriate consumers.");

Claims 8 and 19:

- *wherein the default response value is an average determined from responses to past marketing campaigns.* (see at least column 10, lines 29-32: "... useful statistics can be generated for the segment, such as average amount spent, spending rate, ratios of how much these consumers spend in the segment compared with the population average, response rates to offers, and so forth.");

Claim 15:

- *program instructions comprising a response prediction module that, when executed by a processor,* (see at least Fig. 5: "Predictive Model Generation System");

- *determines a response probability for each of a plurality of customers, the customers being intended targets of a marketing campaign;* (see at least column 7 lines 28-32: "Once consumer vectors have been developed …, a reference set of consumers is selected, having known response rates to offers (or having other characteristics that are known to be related to or good predictors of response rates)." and lines 35-37: "The consumer vector for a proposed target consumer is obtained, and the nearest neighbors in the reference set are identified.");

- *and program instructions comprising an evaluation module that, when executed by a processor,* (see at least Fig. 3 reference number 312 "Account/Segment Analysis" and Fig. 14);

- *determines a response value for each of the customers that indicates a predicted value of a response to the marketing campaign by the customer,* (see at least column 7 lines 32-34: "Each consumer in the reference set has a vector and a value describing the known or predicted response rate relevant to the offer being analyzed.");

- *and that predicts an outcome of the marketing campaign using the response probability and the response value.* (see at least column 7 lines 37-43: "The response rate among the nearest neighbors is aggregated and used as a predictor of the likely response rate for the target consumer. Based on this score for a number of potential target consumers, the marketing effort can be targeted at those consumers most likely to respond favorably, thus improving the efficiency of the marketing campaign.");

Claim 17:

- *wherein a purchase history is not available for a customer, wherein the response value is determined using a purchase history of at least one similar customer* (see at least column 45, lines 5-9: "For example, if response history data is unavailable, the system might instead use a sample of consumers, and consider those who

have purchased the product to have accepted the offer, and those who have not

purchased the product to have rejected the offer.");

Claim 18:

- *wherein the marketing campaign is to be directed also at additional customers for*
  which no response value is determined, and wherein the evaluation module (see at
  least Fig. 3, reference number 312: "Account/Segment Analysis")

- *uses a default response value for the additional customers in predicting the*
  outcome of the marketing campaign (see at least column 10, lines 29-32: "… useful
  statistics can be generated for the segment, such as average amount spent,
  spending rate, ratios of how much these consumers spend in the segment
  compared with the population average, response rates to offers, and so forth. This
  information enables merchants to finely target and promote their products to the
  appropriate consumers");

Claim 22:

- *determines a response probability for each of a plurality of customers, the*
  customers being intended targets of a marketing campaign; (see at least column 7
  lines 28-32: "Once consumer vectors have been developed …, a reference set of
  consumers is selected, having known response rates to offers (or having other
  characteristics that are known to be related to or good predictors of response
  rates)." and lines 35-37: "The consumer vector for a proposed target consumer is
  obtained, and the nearest neighbors in the reference set are identified.");

- *determines a response value for each of the customers that indicates a predicted*
  value of a response to the marketing campaign by the customer; (see at least
  column 7 lines 32-34: "Each consumer in the reference set has a vector and a value
  describing the known or predicted response rate relevant to the offer being
  analyzed.");

- *and predicts an outcome of the marketing campaign using the response probability and the response value.* (see at least column 7 lines 37-43: "The response rate among the nearest neighbors is aggregated and used as a predictor of the likely response rate for the target consumer. Based on this score for a number of potential target consumers, the marketing effort can be targeted at those consumers most likely to respond favorably, thus improving the efficiency of the marketing campaign.");

Claim Rejections - 35 USC § 103

13.　　The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14.　　The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

　　　1.　　Determining the scope and contents of the prior art.
　　　2.　　Ascertaining the differences between the prior art and the claims at issue.
　　　3.　　Resolving the level of ordinary skill in the pertinent art.
　　　4.　　Considering objective evidence present in the application indicating obviousness or nonobviousness.

15.　　Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blume in view of Fisher et al (US 2002/0052775 A1), hereinafter "Fisher".

Claim 2:

Blume discloses the limitations of Claim 1, as shown above. Blume does not disclose the following limitation, but Fisher however, as shown, does:

- *wherein the predicted value is at least one selected from the group consisting of predicted revenue from the customer and predicted profit from the customer* (see at least page 4, ¶ 0038: "...to determine the plan's effectiveness and/or practicality. For example, the number of sales due to the marketing plan and the costs per impression can be electronically projected and modeled against the sales goals to determine optimal marketing effectiveness.");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicting a value with the method of Fisher using sales total value from a marketing plan, because in order to "predict future spending of an individual consumer" (see at least Blume, column 2, lines 45-46) for marketing campaigns, it is useful to know the customer "behavior based on actual historical spending patterns" (see at least Blume, column 2, lines 41-42) since this will "increase the marketing plan's effectiveness (percent of target audience reached)" and "speed the implementation of the marketing plan" (see at least Fisher, page 1, ¶ 0006).

Claim 3:

Blume discloses the limitations of Claim 1, as shown above. Blume does not disclose the following limitation, but Fisher however, as shown, does:

- *wherein the predicted value is a predicted response cost associated with the customer.* (see at least page 4, ¶ 0038: "...to determine the plan's effectiveness and/or practicality. For example, the number of sales due to the marketing plan and the costs per impression can be electronically projected and modeled against the sales goals to determine optimal marketing effectiveness.");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicting a value with the method of Fisher using cost total value from a marketing plan, because in order to minimize marketing campaigns cost is necessary to know the customer "behavior based on actual historical spending patterns" (see at least Blume, column 2, lines 41-42) and "the interests of preferences of consumers" (see at least

Blume, column 3, lines 56-57) since this "could reduce a marketing plan's cost per impression, increase the marketing plan's effectiveness (percent of target audience reached)" and "speed the implementation of the marketing plan" (see at least Fisher, page 1, ¶ 0006).

Claim 4:

Blume discloses the limitations of Claim 1, as shown above. Blume does not disclose the following limitation, but Fisher however, as shown, does:

- *wherein the predicted value is a predicted cost of contacting the customer in the marketing campaign* (see at least page 1, ¶ 0009: "...the software application of the present invention can predict, for example, the percent of the target audience that will be reached, the overall costs of implementing the marketing plan, and/or the chance of implementing the marketing plan in a timely manner.");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicting a value with the method of Fisher using a software application to predict the cost total value from a marketing plan, because in order to minimize marketing campaigns cost is necessary to know the customer "behavior based on actual historical spending patterns" (see at least Blume, column 2, lines 41-42) and "the interests of preferences of consumers" (see at least Blume, column 3, lines 56-57) since this "could reduce a marketing plan's cost per impression, increase the marketing plan's effectiveness (percent of target audience reached)" and "speed the implementation of the marketing plan" (see at least Fisher, page 1, ¶ 0006).

16.   Claims 9 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blume in view of Samra et al (US 7,003,476 B1), hereinafter "Samra".

Claim 9:

Blume discloses the limitations of Claim 1, as shown above. Furthermore, Blume discloses the following limitation as shown:

- *and wherein predicting the outcome of the marketing campaign further comprises: using the response probabilities for the plurality of customers to predict a number of responses to be received if the first campaign step were performed toward the plurality of customers;* (see at least column 7 lines 28-32: "Once consumer vectors have been developed …, a reference set of consumers is selected, having known response rates to offers (or having other characteristics that are known to be related to or good predictors of response rates).");

- *selecting a target group of customers from the plurality of customers using the response probabilities, the target group being substantially equal to the predicted number of responses;* (see at least column 7 lines 35-37: "The consumer vector for a proposed target consumer is obtained, and the nearest neighbors in the reference set are identified.");

- *and predicting an outcome of performing the second campaign step toward the target group.* (see at least column 7 lines 37-43: "The response rate among the nearest neighbors is aggregated and used as a predictor of the likely response rate for the target consumer. Based on this score for a number of potential target consumers, the marketing effort can be targeted at those consumers most likely to respond favorably, thus improving the efficiency of the marketing campaign.");

Blume does not disclose the following limitation, but Samra however, as shown, does:

- *wherein the marketing campaign comprises at least first and second campaign steps,* (see at least Fig. 2, reference number 28: "Previous Campaign Results");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicting responses with previous campaign results of Samra because "the user can determine where a response rate has been changing or where profitability has been changing or look at the number of accounts being closed. A user can also analyze particular population segments over time." (See at least Samra, column 4, lines 56-59).

Claim 13:

Blume discloses the limitations of Claim 9, as shown above. Furthermore, Blume discloses the following limitation as shown:

- *wherein the response value is determined* (see at least column 7 lines 32-34: "Each consumer in the reference set has a vector and a value describing the known or predicted response rate relevant to the offer being analyzed.");

Blume does not disclose the following limitation, but Samra however, as shown, does:

- *for a particular marketing step in the marketing campaign.* (see at least Fig 9, reference number 104: "Using data in a consumer database to determine a target group based on predicted customer profiles");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicted a response value with the consumer database of Samra to determine a target group (i.e. a marketing step) because it will "optimized marketing campaign selections based on criteria selected from the consumer database" (see at least Samra, column 2, lines 61-63).

Claim 14:

Blume discloses the limitations of Claim 13, as shown above. Blume does not disclose the following limitation, but Samra however, as shown, does:

- *wherein the marketing step comprises contacting the customer by at least one selected from the group consisting of email,* (see at least column 6, lines 12-13: "…internet E-mail based campaigns…");

- *website advertisement, letter, telephone, fax and personal contact.* (see at least column 3, lines 8-10: "…create a marketing program to best use such marketing resources as mailing, telemarketing, and internet online by allocating resources based on consumer's real value.");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicting an outcome of marketing campaign with the advertisement tools of Samra, which are well know in the advertisement industry because

these advertisement tools will persuade, inform or motivate the process of purchasing, supporting or approving the marketing campaigns offers.

17.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Blume/Samra in view of Fisher.

Claim 10:

The combination of Blume/Samra discloses the limitations of Claim 9, as shown above. The combination of Blume/Samra does not disclose the following limitation, but Fisher however, as shown, does:

- *wherein the target group initially is not equal to the predicted number of responses, further comprising adjusting the target group to be equal to the predicted number of responses.* (See at least page 4, ¶ 0039: "This embodiment also allows the degree of optimization to be adjusted to focus on particular levels of the marketing plan.");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicting responses with the optimizer adjusting method of Fisher because "through a series of computerized, iterative steps using information about the defined goals of and the resources available to the marketing plan", (see at least Fisher page 4, ¶ 0039) will provide an optimal marketing campaign plan.

18.   Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Blume/Samra in view of Lin et al (US 6,847,934 B1), hereinafter "Lin".

Claim 11:

The combination of Blume/Samra discloses the limitations of Claim 9, as shown above. The combination of Blume/Samra does not disclose the following limitation, but Lin however, as shown, does:

- *wherein at least one campaign step in the marketing campaign comprises a plurality of alternative campaign elements, further comprising assigning the customers to the campaign elements using an optimizing algorithm.* (see at least, column 2 and 3, lines 66-67 and 1, respectively: "...the market selection

optimization method generally comprises the steps of assigning product offers to

consumers such that each consumer is assigned at least one product offer");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to combine the Blume/Samra technique of predicting responses from marketing

campaigns with the Lin's marketing selection optimization method because it will provide "clients

with the ability to effectively maximize profits in operations involving selling multiple products to

multiple customers under the objective of maximizing the total profit to the client offering the

products to customers." (See at least Lin, column 2, lines 55-59).

Claim 12:

The combination of Blume/Samra discloses the limitations of Claim 11, as shown above. The

combination of Blume/Samra does not disclose the following limitation, but Lin however, as

shown, does:

- *wherein the optimizing algorithm assigns and reassigns the customers to the*
  campaign elements while evaluating the predicted outcome of the marketing
  campaign, but does not reassign a customer to a campaign element to which the
  customer has previously been assigned. (see at least column 2 and 3, lines 65-67
  and 1-8, respectively: "...the market selection optimization method generally
  comprises the steps of assigning product offers to consumers such that each
  consumer is assigned at least one product offer; determining a difference in
  expected profitability associated with the assigned at least one product offer and a
  different product offer for each consumer; sorting the consumers according to the
  respective difference in expected profitabilities associated with the product offers;
  and reassigning the product offers to the sorted consumers in accordance with the
  respective difference in expected profitabilities.");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to combine the Blume/Samra technique of predicting responses from marketing

campaigns with the Lin's marketing selection optimization method because it will provide "clients

with the ability to effectively maximize profits in operations involving selling multiple products to multiple customers under the objective of maximizing the total profit to the client offering the products to customers." (See at least Lin, column 2, lines 55-59).

19.   Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blume in view of Lin.

Claim 20:

Blume discloses the limitations of Claim 15, as shown above. Blume does not disclose the following limitation, but Lin however, as shown, does:

- *wherein at least one campaign step in the marketing campaign comprises a plurality of alternative campaign elements, further comprising: program instructions comprising an assignment module that, when executed by a processor,* (see at least Fig. 3, reference number 305)

- *assigns the customers to the campaign elements using an optimizing algorithm.* (see at least, column 2 and 3, lines 66-67 and 1, respectively: "...the market selection optimization method generally comprises the steps of assigning product offers to consumers such that each consumer is assigned at least one product offer");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicting responses from marketing campaigns with the Lin's marketing selection optimization method because it will provide "clients with the ability to effectively maximize profits in operations involving selling multiple products to multiple customers under the objective of maximizing the total profit to the client offering the products to customers." (See at least Lin, column 2, lines 55-59).

Claim 21:

Blume discloses the limitations of Claim 20, as shown above. Blume does not disclose the following limitation, but Lin however, as shown, does:

- *wherein the assignment module* (see at least Fig. 3, reference number 305);

- *assigns and reassigns the customers to the campaign elements while evaluating the predicted outcome of the marketing campaign, but does not reassign a customer to a campaign element to which the customer has previously been assigned.* (see at least column 2 and 3, lines 65-67 and 1-8, respectively: "…the market selection optimization method generally comprises the steps of assigning product offers to consumers such that each consumer is assigned at least one product offer; determining a difference in expected profitability associated with the assigned at least one product offer and a different product offer for each consumer; sorting the consumers according to the respective difference in expected profitabilities associated with the product offers; and reassigning the product offers to the sorted consumers in accordance with the respective difference in expected profitabilities.");

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Blume technique of predicting responses from marketing campaigns with the Lin's marketing selection optimization method because it will provide "clients with the ability to effectively maximize profits in operations involving selling multiple products to multiple customers under the objective of maximizing the total profit to the client offering the products to customers." (See at least Lin, column 2, lines 55-59).

Conclusion

20.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Samra et al (US 7,006,979 B1) discloses methods and systems using models for evaluating marketing campaign data in the form of database scores.

- Samra et al (US 7,010,495 B1) discloses methods and systems for increasing efficiency of a marketing campaign by building models of predicted customer profiles.

- Blume et al (US 2007/0244741 A1) discloses predictive modeling of consumer financial behavior, including determination of likely responses to particular marketing efforts.

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Nadja Chong** whose telephone number is **570.270.3939**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **JAMES A. REAGAN** can be reached at **571.272.6710**.

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